

A NEW VARIETY OF POIRETIA LATIFOLIA

AND A BRIEF RESUME OF THE GENUS POIRETIA VENT. (LEGUMINOSAE)

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Among recent collections made in Brazil by H. S. Irwin, et al. is a unifoliolate Poiretia. Other known taxa of the genus are 3- or 4-foliolate. The new taxon appears to be a variety of P. latifolia Vog. and is described below.

The faboid genus Poiretia Vent., with its lomentaceous fruit, is included in the tribe Hedysareae DC., Prodr. 2: 307-353. 1825, subtribe Poiretiinae Burkart, Darwinians 3: 125. 1939.

POIRETIA Vent. Mém. Cl. Sc. Math.-Phys. Inst. Nat. France 1807(1): 4. July 1807, nom. cons., non J. F. Gmelin 1791, nec Cav. 1797, nec J. E. Smith 1808.

Turpinia Pers. Syn. Pl. 2: 314. Sept. 1807, nom. rej., non Humb. & Bonpl. Apr. 1807 ('1808'), nec Vent. Jul. 1807, nec Raf. 1808, nec Lex. 1824.

Plants herbaceous or suffrutescent, erect or scandent, to about 3-4 m. high; stipules lanceolate, usually glandular, caducous; stipels present at base of lower pair of leaflets, linear to lanceolate or ovate, usually glandular, caducous; leaves 1-, 3-, or 4-foliolate; leaflets chartaceous to coriaceous, linear to ovate, obovate, or suborbicular, glandular-punctate below, the glands sometimes visible above; inflorescences axillary or terminal, racemose, sometimes paniculate or spicate, few- or many-flowered; bracts stipule-like; bracteoles lacking; flowers small to moderate in size, 4-20 mm. long; calyx glandular-punctate, campanulate with 5 subequal lobes shorter than the tube, the vexillar lobes smaller than the others and somewhat connate; petals yellow, glandular-punctate, the vexillum reflexed, glabrous or nearly so; stamens 10, monadelphous, the anthers dimorphic, alternately oblong and basifixed or elliptic and dorsifixed; ovary sessile, 5-8-ovulate, glabrous or pubescent, the stigma terminal, minutely capitate; fruit sessile, oblong, laterally compressed, 1-8-articulate, glandular-punctate, sometimes verruculose; seeds brown, reniform, compressed, the hilum elliptic, lateral.

Type species: Poiretia scandens Vent., a synonym of P. punctata (Willd.) Desv.

- Plants scandent; flowers 4-8 mm. long in axillary racemes; fruit about 3 mm. wide; leaves 4-foliolate, the leaflets obovate with margin often glandular but not completely hyaline. Flowers 4-5 mm. long; calyx, fruit, and leaflets glabrous or rarely pubescent. Mexico, West Indies, South America to Peru and Brazil. 1. P. punctata.
 Flowers 6-8 mm. long; calyx, fruit, and leaflets pubescent or the leaflets rarely glabrous. Brazil. . . 2. P. pubescens.
 Plants usually erect; flowers 6-20 mm. long in axillary or terminal racemes or panicles; fruit 5-6 mm. wide; leaves 1, 3-, or 4-foliolate, the leaflets linear to ovate, obovate, or suborbicular, the margin sometimes hyaline. Flowers 6-8 mm. long; margin of leaflets not obviously hyaline. Leaflets 3 or 4, linear to lanceolate or oblanceolate. Leaves 4-foliolate; leaflets linear to linear-oblanceolate; flowers about 6 mm. long in axillary racemes. Brazil. 3. P. angustifolia.
 Leaves 3-foliolate; leaflets linear-lanceolate to lanceolate or lanceolate-oblong; flowers about 7 mm. long in terminal panicles. Brazil. 4. P. longipes.
 Leaflets 4, obovate to elliptic or suborbicular; Brazil, Uruguay, Argentina. 5. P. tetraphylla.
 Flowers 10-20 mm. long; margin of leaflets glandular and usually hyaline. Leaflets 4, ovate-elliptic, rounded at the apex and base. Brazil, Paraguay. . . . 6a. P. latifolia var. latifolia.
 Leaflets 1 or 3, ovate or elliptic, cordate or acute at the base or sometimes rounded. Leaves 3-foliolate; leaflets usually ovate, sometimes elliptic, the apex rounded or acute, the base cordate to rounded. Brazil. . . 6b. P. latifolia var. coriifolia.
 Leaves 1-foliolate; leaflets elliptic, acute at apex and base. Brazil. . . . 6c. P. latifolia var. unifoliolata.
1. POIRETIA PUNCTATA (Willd.) Desv. Journ. Bot. Agric. 1: 122, tab. 5, fig. 17. 1813; Mém. Soc. Linn. Paris 4: 308. 1826. Glycine punctata Willd. Sp. Pl. 3: 1066. 1802. Type: Poiteau, Haiti (B herb. Willd. n^o. 13469).
Poiretia scandens Vent. Mém. Cl. Sc. Math.-Phys. Inst. Nat. France 1807(1): 4. July 1807; Choix, tab. 42. Nov. 1807. Type: Turpin, "Domingo", "Saint-Dominique" (P).
Turpinia punctata (Willd.) Pers. Syn. Pl. 2: 314. Sept. 1807.
Poiretia densiflora Mart. Flora 20, beibl. 2: 124. 1837. Type: Martius, "in montibus apricis, saxosis, ad Rio de Janeiro, in prov. minarum passim," Minas Gerais, Brazil (BR).
Poiretia multiflora Mart. & Gal. Bull. Acad. Roy. Brux. 10(2): 179. 1843. Type: Galeottii 3270, "savanes de Zacuapan," Veracruz, Mexico (BR).
Poiretia refracta Griseb. Cat. Pl. Cuba 72. 1866. Type: C. Wright 2311, Oriente, Cuba (GOET ?).

Herbaceous or suffrutescent vine; stems to about 3 m. long, generally glabrous or puberulent; stipules linear-lanceolate, attenuate, 1-3 mm. long, 1 mm. wide; stipels linear-lanceolate, 1-2 mm. long, caducous; leaves 4-foliolate, the axis (0.5-) 1-4 (-6) cm. long; leaflets chartaceous, glabrous or nearly so, obovate, 5-50 mm. long and wide, obtuse, sometimes emarginate, the base acute, the margin not conspicuously hyaline; inflorescences axillary, racemose; flowers 4-5 mm. long; calyx glabrous or, in South America, sometimes puberulent, about 2 mm. long; fruit glabrous or rarely somewhat puberulent, 2-3 cm. long, 3 mm. wide, the articles 3-5 mm. long; seeds about 2.5-3 mm. long, 1-1.5 mm. wide.

Distribution: In wooded areas, usually climbing on shrubs, Mexico, Central America, eastern Cuba, Hispaniola, Colombia, Ecuador, Peru, Bolivia, Venezuela, Brazil.

Representative collections:

MEXICO: Sinaloa: Mazatlán, González Ortega 6396. Nayarit: Near Mazatán on road to Varas, Feddema 1053. Mexico: Temascaltepec, Nayarac, Hinton 5142; Hinton 6751. Oaxaca: Río Cascabel, Mell 2227, 2286. Oaxaca ? or Veracruz ? : Consoquitla, Liebmann 4696. Veracruz: Zacuapan, Purpus 1879, 3046, 16215. Chiapas: Cascada, Matuda 1618. Montecrista, Matuda 1976. Mun. Venustiano Carranza, above Soyatitán, Ton 3140. GUATEMALA: Huehuetenango: near Jacaltenango, Nelson 3574. Jutiapa: Volcan Flores, Shannon 3677. Jalapa: Laguna de Ayarza, Heyde & Lux 4174. EL SALVADOR: San Salvador, Calderón 65; Standley 19190. Ahuachapán, Standley 19926; Padilla 567. HONDURAS: Morazán: San Antonio, Molina 735, 1159; Swallen 10925. Copán: Between Hacienda Grande and Ostuman, Molina 24762. COSTA RICA: San José: Alto de Santa Barbara, Pittier 1650. Escasú, Standley 32352. N of Santa Ana, A. Jiménez M. 1299. Alajuela: Alajuelita, Tonduz 9079. Panama: Cocle: Ola, Pittier 5082. CUBA: Oriente: Puntón de Cuero, N of Imías, Morton & Alain 8871. HAITI: Massif des Malheux, Thomazeau, Ekman H.1066. Massif de la Selle, Petionville, Fourcy, Ekman H.1140. Morne la Selle, Terre Froid, Holdridge 1806. Marmelade, Leonard 8431. St. Michel de l'Atalaye, Leonard 7176. Cabaret, Leonard & Leonard 11897. Port de Paix, Leonard & Leonard 1111. Jean Rabel, Leonard & Leonard 4313, 4572. Bombardopolis, Leonard & Leonard 13373. DOMINICAN REPUBLIC: Without exact locality, Wright, Parry, & Brummel 99. Santiago: Igua, J. Jiménez 1189. Monte Colorado near La Placeta, J. Jiménez 3818. San Juan: Piedra del Aguacate to Río del Oro, Howard & Howard 9395. Barahona: La Hotte, Howard 12266. COLOMBIA: Cundinamarca: Fusagasuga to Pandi, Pennell 2727. Cauca: Popayán, Lehmann 4752. Huila: Neiva, Marulanda Caicedo 4. VENEZUELA: Distrito Federal: Near Caracas, Pittier 7430, 7431. Between Antimano and Las Adjuntas, Pittier 12253. Río Macarao, Jahn 431. Between Baruta and Sabana Grande, Ll. Williams 10589. Between Caracas and La Guaira, Ll. Williams & Alston 34. Miranda: Las Mostazas, beyond Los Teques, Allart 195. Oripoto, Gines 4562. Carabobo: Valencia,

Pittier 8684. Bolívar: Between La Paragua and El Cristo, Killip 37617. ECUADOR: Barraganetal, Stevens 303. PERU: Cajamarca: Between Santa Cruz and Tamborapa, Lopez, Sagastegui, & Collantes 4122. BOLIVIA: Santa Cruz, Kuntze s. n., May 1892. BRAZIL: Pernambuco: Tapera, Pickel 3104. Caruarú, Lima 50-524. Bahia: Machado Portello, Rose & Russell 20008. Goiás: Between Posse and Alvorado, Irwin et al. 14956. Distrito Federal: Brasília, Pires et al. 9549. Minas Gerais: Lagoa Santa, Warming s. n. Belo Horizonte, Capoeirinha, Magalhães 3031. Paraopeba, Herlinger [RB no.] 88225. Rio de Janeiro: "St. Salvador," Riedel 451.

2. POIRETIA PUBESCENS Vog. 12: 52. 1838.

Type: Sellow, "ad Rio Jan.", Brazil (B destroyed; Field Mus. Photo 2146 ex B; F fragment).

Herbaceous vine with stems to about 4 m. long, generally puberulent; stipules lanceolate, attenuate, 3-6 mm. long, 1-1.5 mm. wide; leaves 4-foliolate, the axis 2-5.5 cm. long; leaflets chartaceous, puberulent or rarely glabrous, obovate, 1-4 cm. long, 5-30 mm. wide, rounded at the apex, the base cuneate, the margin not hyaline; inflorescences axillary, racemose or spicate; flowers 6-8 mm. long; calyx puberulent, about 2 mm. long; fruit puberulent, 2-3 cm. long, 3 mm. wide, the articles 4-6 mm. long; seeds about 2.5-3 mm. long, 1 mm. wide.

Distribution: In wooded areas, climbing on shrubs, Brazil: Goiás, Minas Gerais, São Paulo.

BRAZIL: Goiás: Chapada dos Veadeiros, ca 5 km NE of Francisco Sá, road to Salinas, Irwin et al. 23194. Minas Gerais: Mun. Santa Luzia, Fazenda da Chicaca, Assis 118. Carandai, Quebra-Cambão, Duarte 654. Estrada dos Borges, near Belo Horizonte, Agronomic Institute, Irwin 2336. Serra do Espinhaço, ca 15 km N of São João da Chapada, Irwin et al., 28123. Sao Paulo: Ypanema, Riedel 2043.

3. POIRETIA ANGUSTIFOLIA Vog. Linnaea 12: 53. 1838.

Syntypes: Sellow, Minas Gerais, Brazil (B destroyed, Field Mus. Photo 2143 ex B); Manso & Lhotzky, Minas Gerais, Brazil.

Erect, suffrutescent herb, to about 70 dm. high, generally glabrous; stipules linear, attenuate, 5-7 mm. long, 0.5 mm. wide; stipels linear, minute, fugacious; leaves 4-foliolate, the axis 1-2 cm. long; leaflets chartaceous, glabrous, linear to linear-ob lanceolate, 5-20 mm. long, 0.5-3 mm. wide, mucronulate, the base cuneate, the margins revolute; inflorescences axillary, few-flowered but in aggregate appearing spicate; flowers about 6 mm. long; calyx glabrous, about 2 mm. long; fruit glabrous, 2-3.5 cm. long, 5-6 mm. long, the articles about 5-6 mm. long; seeds about 2-2.5 mm. long, 1.5 mm. wide.

Distribution: In cerrado and margin of gallery woods, southeastern Brazil: Goiás to Paraná.

BRAZIL: Without exact locality: "Mugy," Riedel 1553. Distrito Federal: Brasília, Irwin et al. 11083. Goiás: Serra dos Pirineus, ca 15 km S of Corumbá, Irwin et al. 10811. Serra do Facão, ca 25 km NE of Catalão, Irwin et al. Minas Gerais: Lagoa Santa, Warming s. n. Uberava, Regnell III.422. Uberlandia, Macedo 948. Morro das Pedras, ca 26 km NE of Patrocínio, Irwin et al. 25573. São Paulo: São Paulo, Vila Morais, Handro 45309. Parara: Jaguariaiva: Ponta Grossa, Parque Vila Velha, Hatschbach 13106. "Rod. Jaguariaiva-Senges, Hatschbach 8654.

4. POIRETIA LONGIPES Harms, Fedde Repert. Sp. Nov. 9: 440. 1911.

Type: Peckolt, July 1911, São Paulo, Brazil (B destroyed; Field Mus. photo 2144 ex B; F fragment).

Poiretia longipetiolata Hoehne, Bol. Inst. Brasil. Sc. 2: 247, pl. 3. 1926. Type: Gehrt 4043, São Paulo, Brazil, "Pedregulho, interior do Estado" (SP ?).

Erect subshrub, generally glabrous; stipules and stipels not known; leaves 3-foliolate, the axis 3-12 mm. long; leaflets subcoriaceous, glabrous, linear-lanceolate to lanceolate or lanceolate-oblong, 7-15 mm. long, 1-2 mm. wide, mucronulate, the base cuneate; inflorescences terminal, paniculate and axillary, racemose; flowers about 7 mm. long; calyx glabrous, 2.5-3 mm. long; fruit glabrous, 1.5-2.5 cm. long, 3-4.5 mm. wide, the articles 5-8 mm. long.

Distribution: São Paulo, Brazil.

5. POIRETIA TETRAPHYLLA (Poir.) Burkart, Darwiniana 3: 224. 1939.

Psoralea tetraphylla Poir. in Lam. Encyc. Meth. Bot. suppl. 4: 589. 1816. Type: Commerson, Buenos Aires, Argentina (P).

Poiretia psoraloides DC. Prodr. 2: 315. 1825. Based on Psoralea tetraphylla Poir.

Erect, suffrutescent herb, to about 1 m. high, generally glabrous or subglabrous; stipules lanceolate, attenuate, 5-10 mm. long, 1 mm. wide; stipels about 2-4 mm. long, 0.5 mm. broad, attenuate, caducous; leaves 4-foliolate, the axis about 2-5 cm. long; leaflets chartaceous to subcoriaceous, glabrous, obovate to suborbicular, about 5-25 mm. long, 5-20 mm. wide, the apex and base usually rounded, the margin not conspicuously hyaline; inflorescences racemose, terminal or axillary; flowers 6-8 mm. long; calyx glabrous or subglabrous, 2-3 mm. long; fruit glabrous, 1-4 cm. long, 5-6 mm. wide, the articles about 5-7 mm. long; seeds 3 mm. long and 2 mm. broad.

Distribution: In cerrado, grassland and open woods, southeastern Brazil: Goiás, Minas Gerais; Uruguay; northeastern Argentina.

BRAZIL: Goiás: Serra dos Pirineus, 15 km N of Corumbá de Goiás on road to Niquelândia, Irwin et al. 18594. Minas Gerais: "C. Verde," Macedo 653. Ituiutaba, Macedo 3194. Uberava, Regnell III. 423a. URUGUAY: Cerro Largo: Río Negro, Rosengurt et al. A-782. Canelones: Atlántida, Rosengurt B-2821. ARGENTINA: Chaco: Las Palmas, Joergensen 2138. Las Breñas, Venturi 9748. Santa Fe: Mocoví, Venturi 52. Corrientes: Empedrado, Río Paraná, Estancia "Las Tres Marias," Pedersen 3013. Concepción, Rincón de Luna, Pedersen 4483.

6. POIRETIA LATIFOLIA Vog. Linnaea 12: 54. 1838.

Plants usually erect, sometimes scandent, suffrutescent, to about 3 m. high, generally glabrous; stipules obliquely ovate to lanceolate, acute, 5-15 mm. long, 3-5 mm. wide; stipels 3-7 mm. long, 1-1.5 mm. wide; leaves 1-, 3-, or 4-foliolate, the axis 1-7 cm. long; leaflets coriaceous or subcoriaceous, glabrous, ovate to elliptic, about 1.5-7.5 cm. long, 1-5 cm. wide, acute or obtuse, the base acute, rounded to cordate, the margin usually densely glandular, hyaline; inflorescences commonly terminal, paniculate, but also axillary; bracts obliquely lanceolate-oblong about 2-10 mm. long, 1-2 mm. wide; fruit glabrous, 3-4 cm. long, 5-6 mm. wide, the articles 6-8 mm. long; seeds 2.5-3 mm. long and 2 mm. wide.

Distribution: In cerrado thickets, Brazil, Paraguay, Argentina.

6a. POIRETIA LATIFOLIA var. LATIFOLIA

Type: Sellow, Montevideo Uruguay (B destroyed).

The typical variety has 4-foliolate leaves, the leaflets ovate to elliptic, 1-5 cm. long, 1-3 cm. wide, rounded at the apex and base.

Distribution: Brazil: Minas Gerais, Paraná, Santa Catarina; Paraguay.

BRAZIL: Minas Gerais: Serra do Espinhaço, ca 4 km N of São João da Chapada, Irwin et al. 28183. Paraná: Balsa Nova, Bugre, Hatschbach 9526. Palmas, São Agostinho, Hatschbach 15429. Santa Catarina: W of Curitiba toward Campos Novos, Smith & Klein 8340. Chapecó, Fazenda Campo São Vicente, 24 km W of Campo Erê, Smith et al. 9352. Lajes, Estrada da Rodagem S of Lajes, Smith & Reitz 9972. Agua Doce, Fazenda Esperança, Campos de Palmas, Smith & Klein 13496. PARAGUAY: Tapytá, Joergensen 4550.

6b. POIRETIA LATIFOLIA var. CORIIFOLIA (Vog.) Benth. in Mart. Fl. Bras. 15(1): 79. 1859.

Poiretia coriifolia Vog. Linnaea 12: 55. 1838. Type: Sellow, "In Brasilia meridionali: Sellow leg. (in Montevideo?)", Uruguay or Brazil (B destroyed).

This variety is readily distinguished by its 3-foliolate leaves, the leaflets usually ovate, sometimes broadly elliptic, 2-7.5 cm. long, 2-5 cm. wide, rounded or acute at the apex, rounded or cordate at the base.

Distribution: Brazil: Goiás, Minas Gerais, Mato Grosso.

BRAZIL: Goiás: Chapada dos Veadeiros, Irwin et al. 12341, 24134, 24707. Serra dos Pirineus, 20 km NW of Corumbá de Goiás, Irwin et al. 19237. Distrito Federal: Córrego Paranoazinho, near Sobradinho, Irwin et al. 11500. Riberão Torto, ca 10 km NE of Brasília, Irwin et al. 13082. Mato Grosso: Serra do Roncador, ca 60 km N of Xavantina, Irwin et al. 16666. Upper Rio Araguaia, S of Xavantina Irwin et al. 16827, 17343. Minas Gerais: Sitio, Dorsett et al. 299b. "C. Verde," Macedo 634. Ituiutaba, Macedo 1614. Bento Pires near Belo Horizonte, Williams & Assis 5926, 6110. Diamantina, Pereira 1595; Irwin 2459. Ca 10 km SE of Paracatú, Irwin et al. 26234.

6c. POIRETIA LATIFOLIA var. UNIFOLIOLATA Rudd, var. nov.

Type: H. S. Irwin, R. H. Maxwell, D. C. Wasshausen 20431, Brazil, "western slopes, cerrado with exposed sandstone cliffs and outcrops, Serra do Cipó, Minas Gerais, ca. km. 112 (ca. 135 km. N. of Belo Horizonte), elev. 1200 m., 18 February 1968. Holotype US 2590985 A; isotype NY.

A varietate typica foliis unifoliolatis, foliolis ellipticis, apice basique acutis differt.

This variety is characterized by 1-foliolate leaves, the leaflets elliptic, 1.5-3 cm. long, and about 1 cm. wide, acute at the apex and base.

Distribution: Known only from the type collection.

The collections cited above are at US unless otherwise noted. Additional collections from South America were cited by Burkart in his treatment of the genus in Darwiniana 3: 222-228. 1939.